

MLF BACTERIA FOR HIGH ALCOHOL/PHENOLS IN 5,000 hL WINE THE NEW STANDARD FOR THE MALOLACTIC FERMENTATION

► The solution for high alcohol and elevated phenolic conditions

MaxBacti™ AF3 is another strain of freeze dried MLF starter cultures of *Oenococcus oeni* with unique properties.

MaxBacti™ AF3 has been selected for special requirements of the malolactic fermentation in wines with high alcohol and phenolic levels.

► New +A³ process

The new +A³ process accommodates an increased number of active cells in combination with a so far unreached fast activation and perfected adaption of the bacteria for the inoculation in wine or must. This big pack can be used like the smaller packs. Flexible dosage because it is delivered in 5 packs à 1,000 hL.

► MLF for high alcohol and elevated phenolic levels

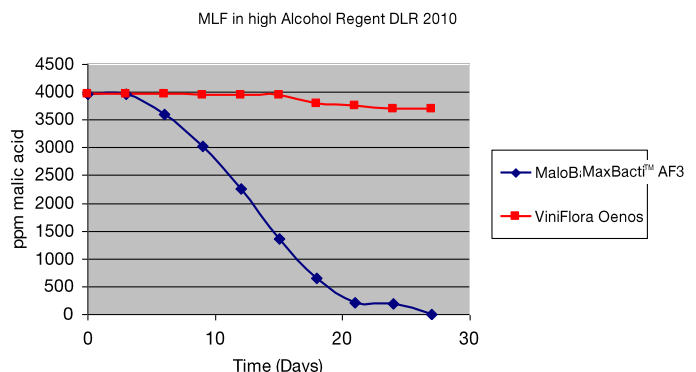
See the example of a Regent 2010 of DLR Bad Kreuznach with high alcohol:

- 17.5% Vol. Alc.
- pH: 3.6
- TA 7,4 g/l
- Phenols: 2984 ppm

In this direct comparison on the right side you can see that MaxBacti™ AF3 works even under difficult conditions for a MLF.

- High tolerance to high phenolic conditions
- Very high tolerant to high alcohol conditions in wine, up to 17% Vol. Alc.
- Outstanding fruity flavour profile, for condimental wines
- Economical solution for high volumes: 5,000 hL

- For fruity red and white wines with high phenol and alcohol levels
- Increase of the survival rate of the bacteria at inoculation.
- Ideal adaptation to difficult conditions in wine already in 6-8 hours!



Important information

- To dissolve product exactly **40 L** of water is needed for a **1,000 hL**-pouch and exactly **200 L** for a **5,000 hL**-unit.
- **First** put in the +A³-media (1), **then** the bacteria (2). The water has to be non-chlorinated and non-distilled.

► Additional information

After activation of the bacteria the suspension can be stored for **max. 5 days at 4-6 °C**. For another inoculation with the stored suspension adjust the temperature to the wine's temperature. Stir well again before inoculation. The addition of SO₂ can be done right after the completion of the MLF in order to avoid the growth of other undesired micro-organisms.

The addition of Thiamine (Vit.B1) or FermControl™ to the primary fermentation is recommended to reduce the SO₂ formation of yeast.

► Package content


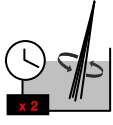
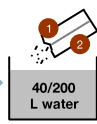
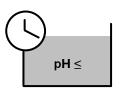
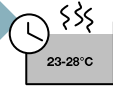
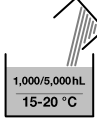
Available for 5,000 hL (or MaloBacti™ AF3 for 25/250 hL) wine or juice, packed in 5 units à 1,000 hL. Freeze-dried MLF starter cultures; *Oenococcus oeni* with a minimum cell count of > 2 x 10¹¹ CFU/g. Strain: 22582.

► Shelf life / storage

2 years at min. -18 °C
4 weeks at +5 °C
5 days at 4-6 °C, if product is already activated
Store frozen, always use the whole package at once



PRACTICAL APPLICATION ADVICE

<p>1</p>  <p>Oenological properties</p> <ul style="list-style-type: none"> ▶ SO₂: tolerance at pH 3.4 < 60ppm ▶ pH range from 3.3 to 4.2 ▶ Ethanol tolerant up to 17.0% Vol. Alc. ▶ Temperature range: 15-26 °C ▶ For fruity and condimental wines 	<p>4</p>  <p>During activation stir suspension twice.</p>
<p>2</p>  <p>water ▶ non-chlorinated, non-distilled</p> <p>40L ▶ 1,000 hL-pouch</p> <p>200L ▶ 5,000 hL-pouch</p> <ul style="list-style-type: none"> ▶ keep water at 23-28 °C ▶ 1. dissolve the +A³ media (chamber 1) in water ▶ 2. dissolve the bacteria (chamber 2) in in solution, stir for approx. 5-8 min. 	<p>5</p>  <p>After maximum 8 hours of activation the pH will drop to < 3.8. The bacteria are now completely activated. Check with a pH-meter.</p>
<p>3</p>  <p>The activation of the suspension will take 6-8 hours at 23-28 °C.</p>	<p>6</p>  <p>Stir suspension again and inoculate in 1,000/5,000 hL of wine. Stir well again. Maintain temperature of wine at approx. 15-20 °C during MLF.</p>

